

ABSTRACT

One or more masks comprising pseudorandom sequence generating
polynomials are utilized to derive new polynomials to thereby minimize the
5 number of polynomials that need be stored to support use of pseudorandom
sequences. The polynomials each correspond to a given state of a
pseudorandom sequence and derivation of a particular such polynomial will
allow calculation of the corresponding given state. A radio (85) in a code
division multiple access wireless communications system (80) uses this
10 approach to achieve rapid phase correlation with a pseudorandom sequence
that is used by the system to facilitate synchronization.